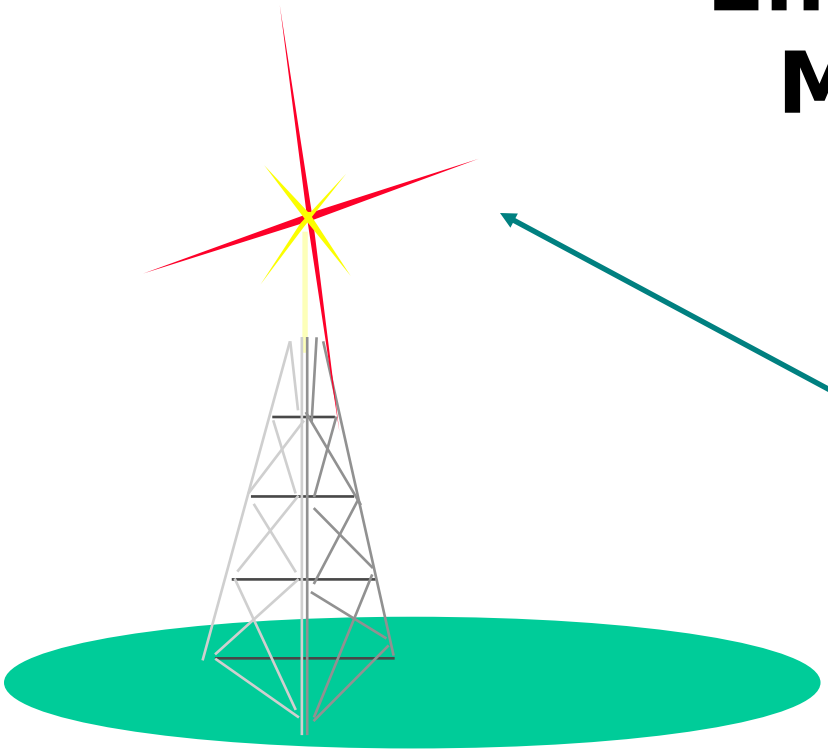
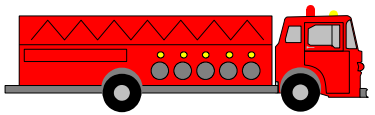
Enterprise Land Mobile Radio (E-LMR)





Overview

- **LMR Description & Uses**
- **USMC LMR Program Genesis**
- **Center of Gravity & Critical Vulnerability**
- **Statement of Need (SON)**
- **Concept of Operations Precepts**
- **Regional Interoperability Opportunities**
- **E-LMR Program Execution**
- **Enterprise E-LMR Program Fiscal Profile**
- **MROC E-LMR Program Implementation Strategy**

Description

- **Handheld, Brick, “Walkie Tal**
- **No Program of Record – CDD expected to be completed by 30 Sept 03**

LMR Uses

- **Law enforcement, criminal investigation, security police / Fire / Force Protection**
- **Transportation or convoy management**
- **Flight line management and maintenance**
- **Emergency and disaster / search and rescue operations**
- **Medical and administrative duties**
- **Installation infrastructure & range management support**
- **Tactical SOC units**
- **Myriad of other uses**

LMR System Program Genesis

- **Federal mandate, driven by “shrinking” spectrum, to replace all wideband Land Mobile Radio assets (100% current USMC inventory) with narrowband assets by 1 Jan, 2008**
- **DOD LMR Policy Aug 2001 further states:**
  - **Mandates centralized LMR Program oversight**
  - **Encourages centralized procurement**
  - **DOD Systems must be APCO-25 compliant**
- **MCSC LMR Program lead**
- **Concurrent PP&O initiative for Force Protection/First Responders resulting in Presidential Budget Decision 810 (PBD 810)**

Center of Gravity

- **Interoperability**
  - **Current USMC LMRs lack interoperability with Federal, State & Local authorities involved with First Response, Homeland Security, Force Protection and day-to-day operations.**
  - **Interoperability problems also exist between USMC garrison and tactical organizations having Force Protection responsibilities.**

Critical Vulnerability

- **Frequency Availability**
  - **No single Radio Frequency band can accommodate all users involved with Homeland Security & Force Security.**
    - **Federal Spectrum (DOD, Coast Guard, Justice, Customs, etc.)**
    - **Non-federal Spectrum (FCC - State, Local, and civilians)**

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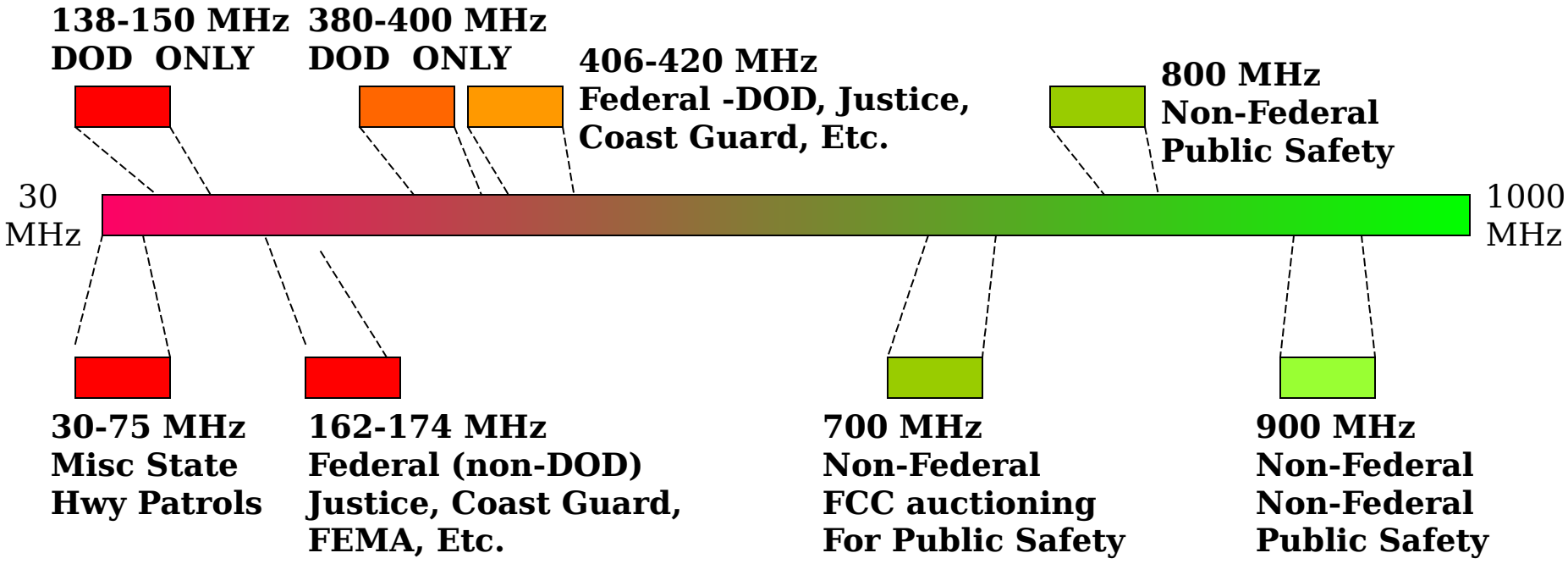
LMR Radio Frequency Bands

30 MHz — **THHR Tuning Range** — 512 MHz



Statement of Need

- **Signed by MCCDC 7 June 02**
  - **Conducted East and West Coast LMR conferences documenting requirements.**
  - **Formally coordinated with MFL, MFP, and MARFORRES.**
  - **Endorsed by PP&O and I&L.**

Statement of Need (cont)

- **Primary user focus of the SON is *USMC First Responders***
- **SON system baseline requirements include:**
  - **Interoperable / Secure / 24/7 continuous operation**
  - **30 mile coverage off-base perimeter**
  - **MARFOR deployable “hubs” for First Responders and Operating Forces**
- **Survey/Study of LMR “As is” and Enterprise LMR “To Be”**

Concept of Operations Precepts

- **Institute Corps-wide Enterprise LMR Solution**
- **Interoperability**
  - **Mandate Corps-wide LMR technical standards**
  - **Acquire interoperable hubs to bridge Corps' network w/ local, State, Federal, & other Service LMR networks**
- **Recognize OCONUS USMC installations/ units unique, but no less critical, requirements**

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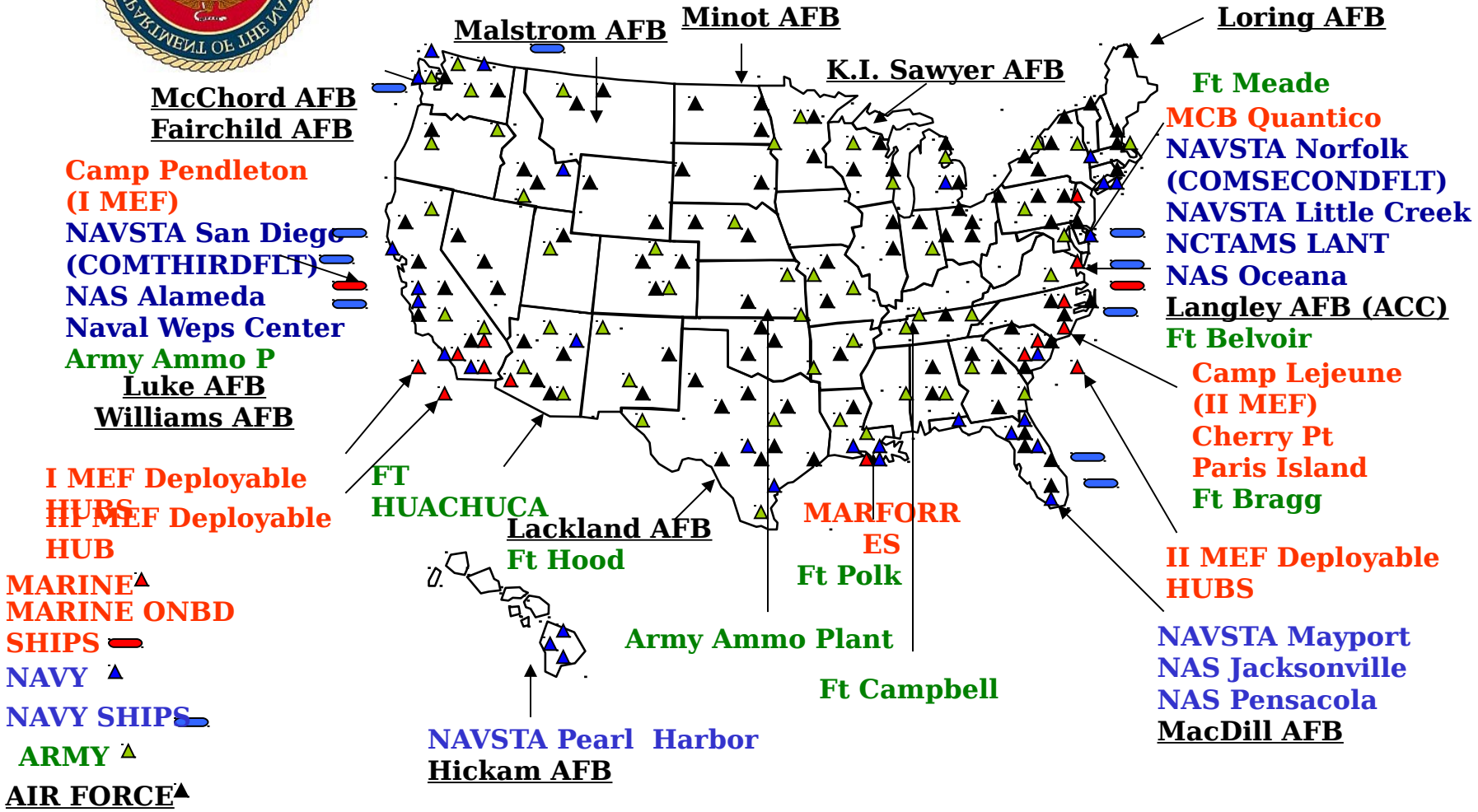
System Regional Interoperability Opportunities



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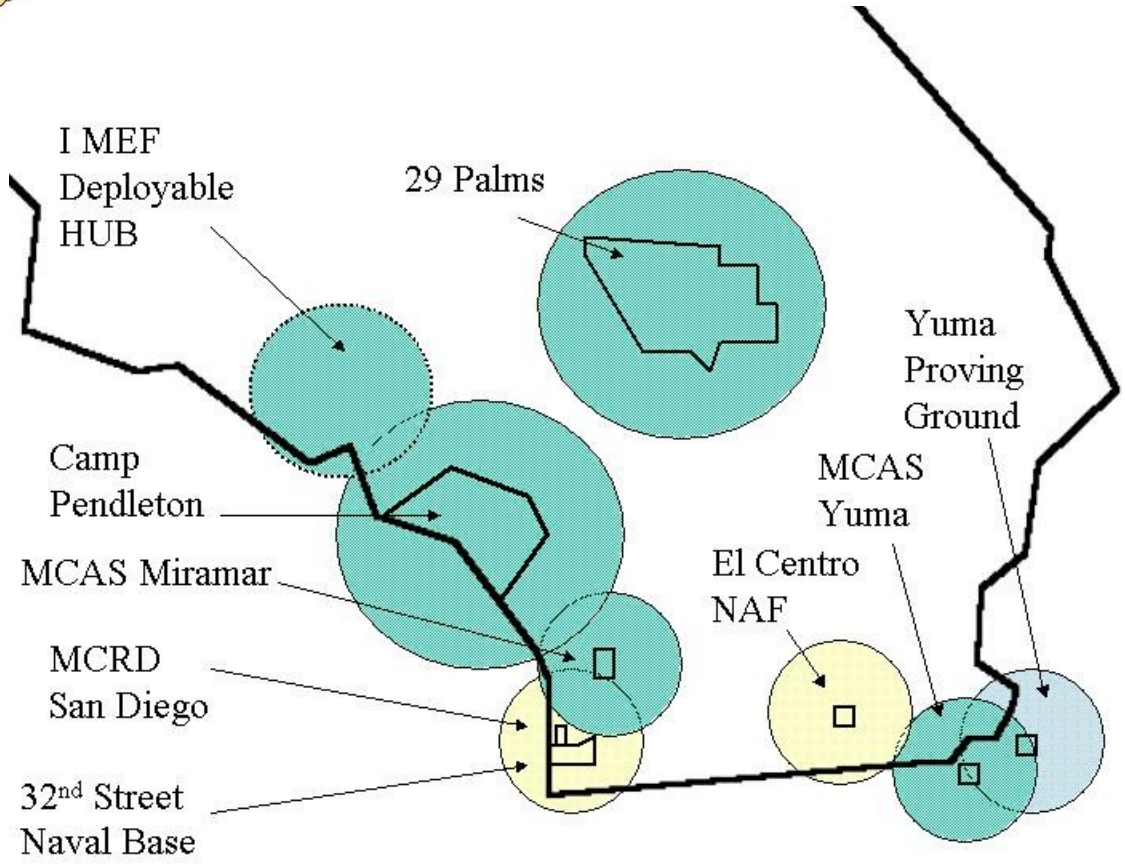
Southern California Regionalization



MROC Mandated E-LMR Program Execution

- **Initial Fielding of Enterprise LMR began in Aug/Sept 02 timeframe using existing PBD-810 funds**

  1) Immediate interoperability solution using legacy systems at all USMC CONUS Installations

  2) (2) Deployable, mobile, trunking hub systems

  3) (1500) Radios for "disadvantaged" First Responders
  - **Japan / CONUS**

  4) APCO 25 Phase 1 Backbone Upgrade:
  Camp Pendleton
  MCB Quantico

  5) Continue E-LMR upgrades for remaining USMC installations

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Proposed Implementation Strategy

FINANCIAL DATA (Then Year $K)

RDTE	FY05	FY06	FY07	FY08	FY09	Total
Required	1,300	0	0	0	0	**1,300**
Budget	0	0	0	0	0	**0**
Delta	**1,300**	**0**	**0**	**0**	**0**	**1,300**
PMC	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**Total**
Required	33,200	40,500	16,900	17,200	17,400	**125,200**
Budget	0	0	0	0	0	**0**
Delta	**33,200**	**40,500**	**16,900**	**17,200**	**17,400**	**125,200**
OMMC/OMMCR	**FY05**	**FY06**	**FY07**	**FY08**	**FY09**	**Total**
Required	2500	6100	9600	10100	10100	**38,400**
Budget	0	0	0	0	0	**0**
Delta	2,500	6,100	9,600	10,100	10,100	38,400
Total Delta	**37,000**	**46,600**	**26,500**	**27,300**	**27,500**	**164,900**

E-LMR Rapid Response System

- Fielded to MARFORLANT/MARFORPAC (Lejeune/Pendleton)
- Fielded with 300 handheld radios per system
- Fielded with VHF and UHF radios
- Interoperable with virtually all LMR frequency bands
- Full commercial telephone interoperability PSTN
- Self contained electrical generator
- Pneumatic 56’ antenna mast section